

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10581413

Source: IFWP

Date Processed by STIC: 6/14/06

***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 06/14/2006

PATENT APPLICATION: US/10/581,413

TIME: 10:28:31

Input Set : A:\5.1295 Sequence Listing.txt

Output Set: N:\CRF4\06142006\J581413.raw

3 <110> APPLICANT: KYOWA HAKKO KOGYO CO., LTD.  
 5 <120> TITLE OF INVENTION: Pharmaceutical composition comprising recombinant antibody  
 against CCR4  
 7 <130> FILE REFERENCE: 00005.001295  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/581,413  
 C--> 9 <141> CURRENT FILING DATE: 2006-06-02  
 9 <150> PRIOR APPLICATION NUMBER: JP04/018430  
 10 <151> PRIOR FILING DATE: 2004-12-03  
 12 <150> PRIOR APPLICATION NUMBER: JP2003-406590  
 13 <151> PRIOR FILING DATE: 2003-12-04  
 15 <150> PRIOR APPLICATION NUMBER: JP2004-155141  
 16 <151> PRIOR FILING DATE: 2004-05-25  
 18 <160> NUMBER OF SEQ ID NOS: 18  
 20 <170> SOFTWARE: PatentIn Ver. 2.1  
 22 <210> SEQ ID NO: 1  
 23 <211> LENGTH: 360  
 24 <212> TYPE: PRT  
 25 <213> ORGANISM: Homo sapiens  
 27 <400> SEQUENCE: 1  
 28 Met Asn Pro Thr Asp Ile Ala Asp Thr Thr Leu Asp Glu Ser Ile Tyr  
 29 1 5 10 15  
 31 Ser Asn Tyr Tyr Leu Tyr Glu Ser Ile Pro Lys Pro Cys Thr Lys Glu  
 32 20 25 30  
 33 Gly Ile Lys Ala Phe Gly Glu Leu Phe Leu Pro Pro Leu Tyr Ser Leu  
 34 35 40 45  
 36 Val Phe Val Phe Gly Leu Leu Gly Asn Ser Val Val Val Leu Val Leu  
 37 50 55 60  
 39 Phe Lys Tyr Lys Arg Leu Arg Ser Met Thr Asp Val Tyr Leu Leu Asn  
 40 65 70 75 80  
 42 Leu Ala Ile Ser Asp Leu Leu Phe Val Phe Ser Leu Pro Phe Trp Gly  
 43 85 90 95  
 45 Tyr Tyr Ala Ala Asp Gln Trp Val Phe Gly Leu Gly Leu Cys Lys Met  
 46 100 105 110  
 48 Ile Ser Trp Met Tyr Leu Val Gly Phe Tyr Ser Gly Ile Phe Phe Val  
 49 115 120 125  
 51 Met Leu Met Ser Ile Asp Arg Tyr Leu Ala Ile Val His Ala Val Phe  
 52 130 135 140  
 54 Ser Leu Arg Ala Arg Thr Leu Thr Tyr Gly Val Ile Thr Ser Leu Ala  
 55 145 150 155 160  
 57 Thr Trp Ser Val Ala Val Phe Ala Ser Leu Pro Gly Phe Leu Phe Ser  
 58 165 170 175  
 60 Thr Cys Tyr Thr Glu Arg Asn His Thr Tyr Cys Lys Thr Lys Tyr Ser  
 61 180 185 190  
 63 Leu Asn Ser Thr Thr Trp Lys Val Leu Ser Ser Leu Glu Ile Asn Ile

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64          195          200          205
66 Leu Gly Leu Val Ile Pro Leu Gly Ile Met Leu Phe Cys Tyr Ser Met
67          210          215          220
69 Ile Ile Arg Thr Leu Gln His Cys Lys Asn Glu Lys Lys Asn Lys Ala
70 225          230          235          240
72 Val Lys Met Ile Phe Ala Val Val Val Leu Phe Leu Gly Phe Trp Thr
73          245          250          255
75 Pro Tyr Asn Ile Val Leu Phe Leu Glu Thr Leu Val Glu Leu Glu-Val
76          260          265          270
78 Leu Gln Asp Cys Thr Phe Glu Arg Tyr Leu Asp Tyr Ala Ile Gln Ala
79          275          280          285
81 Thr Glu Thr Leu Ala Phe Val His Cys Cys Leu Asn Pro Ile Ile Tyr
82          290          295          300
84 Phe Phe Leu Gly Glu Lys Phe Arg Lys Tyr Ile Leu Gln Leu Phe Lys
85 305          310          315          320
87 Thr Cys Arg Gly Leu Phe Val Leu Cys Gln Tyr Cys Gly Leu Leu Gln
88          325          330          335
90 Ile Tyr Ser Ala Asp Thr Pro Ser Ser Ser Tyr Thr Gln Ser Thr Met
91          340          345          350
93 Asp His Asp Leu His Asp Ala Leu
94          355          360
96 <210> SEQ ID NO: 2
97 <211> LENGTH: 28
98 <212> TYPE: PRT
99 <213> ORGANISM: Homo sapiens
101 <400> SEQUENCE: 2
102 Asn Pro Thr Asp Ile Ala Asp Thr Thr Leu Asp Glu Ser Ile Tyr Ser
103 1          5          10          15
105 Asn Tyr Tyr Leu Tyr Glu Ser Ile Pro Lys Pro Cys
106          20          25
109 <210> SEQ ID NO: 3
110 <211> LENGTH: 18
111 <212> TYPE: PRT
112 <213> ORGANISM: Homo sapiens
114 <400> SEQUENCE: 3
115 Asp Glu Ser Ile Tyr Ser Asn Tyr Tyr Leu Tyr Glu Ser Ile Pro Lys
116 1          5          10          15
118 Pro Cys
121 <210> SEQ ID NO: 4
122 <211> LENGTH: 15
123 <212> TYPE: PRT
124 <213> ORGANISM: Homo sapiens
126 <400> SEQUENCE: 4
127 Asp Glu Ser Ile Tyr Ser Asn Tyr Tyr Leu Tyr Glu Ser Ile Pro
128 1          5          10          15
131 <210> SEQ ID NO: 5
132 <211> LENGTH: 5
133 <212> TYPE: PRT
134 <213> ORGANISM: Mus musculus

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136 <400> SEQUENCE: 5
137 Asn Tyr Gly Met Ser
138   1           5
141 <210> SEQ ID NO: 6
142 <211> LENGTH: 17
143 <212> TYPE: PRT
144 <213> ORGANISM: Mus musculus
146 <400> SEQUENCE: 6
147 Thr Ile Ser Ser Ala Ser Thr Tyr Ser Tyr Tyr Pro Asp Ser Val Lys
148   1           5           10           15
150 Gly
153 <210> SEQ ID NO: 7
154 <211> LENGTH: 10
155 <212> TYPE: PRT
156 <213> ORGANISM: Mus musculus
158 <400> SEQUENCE: 7
159 His Ser Asp Gly Asn Phe Ala Phe Gly Tyr
160   1           5           10
163 <210> SEQ ID NO: 8
164 <211> LENGTH: 16
165 <212> TYPE: PRT
166 <213> ORGANISM: Mus musculus
168 <400> SEQUENCE: 8
169 Arg Ser Ser Arg Asn Ile Val His Ile Asn Gly Asp Thr Tyr Leu Glu
170   1           5           10           15
173 <210> SEQ ID NO: 9
174 <211> LENGTH: 7
175 <212> TYPE: PRT
176 <213> ORGANISM: Mus musculus
178 <400> SEQUENCE: 9
179 Lys Val Ser Asn Arg Phe Ser
180   1           5
183 <210> SEQ ID NO: 10
184 <211> LENGTH: 9
185 <212> TYPE: PRT
186 <213> ORGANISM: Mus musculus
188 <400> SEQUENCE: 10
189 Phe Gln Gly Ser Leu Leu Phe Trp Thr
190   1           5
193 <210> SEQ ID NO: 11
194 <211> LENGTH: 138
195 <212> TYPE: PRT
196 <213> ORGANISM: Mus musculus
198 <400> SEQUENCE: 11
199 Met Asn Leu Gly Leu Ser Leu Ile Phe Leu Ala Leu Ile Leu Lys Gly
200   1           5           10           15
202 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Met Lys
203           20           25           30
205 Pro Gly Gly Ser Leu Lys Ile Ser Cys Ala Ala Ser Gly Phe Ile Phe

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206          35          40          45
208 Ser Asn Tyr Gly Met Ser Trp Val Arg Gln Thr Pro Asp Met Arg Leu
209          50          55          60
211 Glu Trp Val Ala Thr Ile Ser Ser Ala Ser Thr Tyr Ser Tyr Tyr Pro
212 65          70          75          80
214 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn
215          85          90          95
217 Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ser Glu Asp Thr Gly Ile
218          100          105          110
220 Tyr Tyr Cys Gly Arg His Ser Asp Gly Asn Phe Ala Phe Gly Tyr Trp
221          115          120          125
223 Gly Arg Gly Thr Leu Val Thr Val Ser Ala
224          130          135
227 <210> SEQ ID NO: 12
228 <211> LENGTH: 132
229 <212> TYPE: PRT
230 <213> ORGANISM: Mus musculus
232 <400> SEQUENCE: 12
233 Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
234 1          5          10          15
236 Ser Ser Ser Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val
237          20          25          30
239 Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Arg Asn Ile
240          35          40          45
242 Val His Ile Asn Gly Asp Thr Tyr Leu Glu Trp Tyr Leu Gln Arg Pro
243          50          55          60
245 Gly Gln Ser Pro Lys Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser
246 65          70          75          80
248 Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
249          85          90          95
251 Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
252          100          105          110
254 Phe Gln Gly Ser Leu Leu Pro Trp Thr Phe Gly Gly Gly Thr Arg Leu
255          115          120          125
257 Glu Ile Arg Arg
258          130
261 <210> SEQ ID NO: 13
262 <211> LENGTH: 119
263 <212> TYPE: PRT
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Synthetic peptide
269 <400> SEQUENCE: 13
270 Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Arg
271 1          5          10          15
273 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ile Phe Ser Asn Tyr
274          20          25          30
276 Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
277          35          40          45

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279 Ala Thr Ile Ser Ser Ala Ser Thr Tyr Ser Tyr Tyr Pro Asp Ser Val
280      50      55      60
282 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
283 65      70      75      80
285 Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Leu Tyr Tyr Cys
286      85      90      95
288 Ala Arg His Ser Asp Gly Asn Phe Ala Phe Gly Tyr Trp Gly Gln Gly
289      100      105      110
291 Thr Leu Val Thr Val Ser Ser
292      115
295 <210> SEQ ID NO: 14
296 <211> LENGTH: 119
297 <212> TYPE: PRT
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Synthetic peptide
303 <400> SEQUENCE: 14
304 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
305 1      5      10      15
307 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
308      20      25      30
310 Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
311      35      40      45
313 Ser Thr Ile Ser Ser Ala Ser Thr Tyr Ser Tyr Tyr Pro Asp Ser Val
314      50      55      60
316 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
317 65      70      75      80
319 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
320      85      90      95
322 Ala Arg His Ser Asp Gly Asn Phe Ala Phe Gly Tyr Trp Gly Gln Gly
323      100      105      110
325 Thr Leu Val Thr Val Ser Ser
326      115
329 <210> SEQ ID NO: 15
330 <211> LENGTH: 112
331 <212> TYPE: PRT
332 <213> ORGANISM: Artificial Sequence
334 <220> FEATURE:
335 <223> OTHER INFORMATION: Synthetic peptide
337 <400> SEQUENCE: 15
338 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
339 1      5      10      15
341 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Arg Asn Ile Val His Ile
342      20      25      30
344 Asn Gly Asp Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
345      35      40      45
347 Pro Gln Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
348      50      55      60
350 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile

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**VERIFICATION SUMMARY**

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Input Set : A:\5.1295 Sequence Listing.txt

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L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date